General

Guideline Title

Diagnosis and management of prosthetic joint infection: clinical practice guidelines by the Infectious Diseases Society of America.

Bibliographic Source(s)

Osmon DR, Berbari EF, Berendt AR, Lew D, Zimmerli W, Steckelberg JM, Rao N, Hanssen A, Wilson WR. Diagnosis and management of prosthetic joint infection: clinical practice guidelines by the Infectious Diseases Society of America. Clin Infect Dis. 2013 Jan;56(1):e1-e25. [175 references] PubMed

Guideline Status

This is the current release of the guideline.

Regulatory Alert

FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- May 12, 2016 – Fluoroquinolone Antibacterial Drugs : The U.S. Food and Drug Administration (FDA) is advising that the serious side effects associated with fluoroquinolone antibacterial drugs generally outweigh the benefits for patients with sinusitis, bronchitis, and uncomplicated urinary tract infections who have other treatment options. For patients with these conditions, fluoroquinolones should be reserved for those who do not have alternative treatment options.

Recommendations

Major Recommendations

Quality of evidence (I–III) and strength of recommendation (A–C) ratings are defined at the end of the "Major Recommendations" field.

I. What Preoperative Evaluation and Intraoperative Testing Should Be Performed to Diagnose Prosthetic Joint Infection (PJI) and What Is the Definition of PJI?
   Preoperative Evaluation (see Figure 1 in the original guideline document)

   1. Suspect PJI in patients with any of the following (B-III): A sinus tract or persistent wound drainage over a joint prosthesis, acute

onset of a painful prosthesis, or any chronic painful prosthesis at any time after prosthesis implantation, particularly in the absence of a pain-free interval, in the first few years following implantation or if there is a history of prior wound healing problems or superficial or deep infection.

2. Evaluation of the patient with a possible PJI should include a thorough history and physical examination (C-III). Items that should be obtained in the history include the type of prosthesis, date of implantation, past surgeries on the joint, history of wound healing problems following prosthesis implantation, remote infections, current clinical symptoms, drug allergies and intolerances, comorbid conditions, prior and current microbiology results from aspirations and surgeries, and antimicrobial therapy for the PJI including local antimicrobial therapy (C-III).
3. A test for sedimentation rate or C-reactive protein (CRP) should be performed in all patients with a suspected PJI when the diagnosis is not clinically evident. The combination of an abnormal sedimentation rate and CRP seems to provide the best combination of sensitivity and specificity (A-III).
4. A plain radiograph should be performed in all patients with suspected PJI (A-III).
5. A diagnostic arthrocentesis should be performed in all patients with suspected acute PJI unless the diagnosis is evident clinically and surgery is planned and antimicrobials can be safely withheld prior to surgery. Arthrocentesis is also advised in patients with a chronic painful prosthesis in whom there is an unexplained elevated sedimentation rate or CRP level (A-III) or in whom there is a clinical suspicion of PJI. It may not be necessary if in this situation surgery is planned and the result is not expected to alter management. Synovial fluid analysis should include a total cell count and differential leukocyte count, as well as culture for aerobic and anaerobic organisms (A-III). A crystal analysis can also be performed if clinically indicated.
6. In PJI where the patient is medically stable, withholding antimicrobial therapy for at least 2 weeks prior to collection of synovial fluid for culture increases the likelihood of recovering an organism (B-III).
7. Blood cultures for aerobic and anaerobic organisms should be obtained if fever is present, there is an acute onset of symptoms, or if the patient has a condition or suspected condition or concomitant infection or pathogen (e.g., *Staphylococcus aureus*) that would make the presence of a bloodstream infection more likely (B-III).
8. Imaging studies such as bone scans, leukocyte scans, magnetic resonance imaging, computed tomography, and positron emission tomography scans should not be routinely used to diagnose PJI (B-III).

Intraoperative Diagnosis of PJI

9. Intraoperative histopathological examination of periprosthetic tissue samples is a highly reliable diagnostic test provided that a pathologist skilled in interpretation of periprosthetic tissue is available. It should be performed at the time of revision prosthetic joint surgery, when available, if the presence of infection is in doubt based on the clinical suspicion of the surgeon and the results will affect management, for example, in deciding between revision arthroplasty and 2-stage exchange (B-III).
10. At least 3 and optimally 5 or 6 periprosthetic intraoperative tissue samples or the explanted prosthesis itself should be submitted for aerobic and anaerobic culture at the time of surgical debridement or prosthesis removal to maximize the chance of obtaining a microbiologic diagnosis (B-II).
11. When possible (see #6, above), withholding antimicrobial therapy for at least 2 weeks prior to collecting intraoperative culture specimens increases the yield of recovering an organism (A-II).

Definition of PJI

12. The presence of a sinus tract that communicates with the prosthesis is definitive evidence of PJI (B-III).
13. The presence of acute inflammation as seen on histopathologic examination of periprosthetic tissue at the time of surgical debridement or prosthesis removal as defined by the attending pathologist is highly suggestive evidence of PJI (B-II).
14. The presence of purulence without another known etiology surrounding the prosthesis is definitive evidence of PJI (B-III).
15. Two or more intraoperative cultures or combination of preoperative aspiration and intraoperative cultures that yield the same organism (indistinguishable based on common laboratory tests including genus and species identification or common antibiogram) may be considered definitive evidence of PJI. Growth of a virulent microorganism (e.g., *S. aureus*) in a single specimen of a tissue biopsy or synovial fluid may also represent PJI. One of multiple tissue cultures or a single aspiration culture that yields an organism that is a common contaminant (e.g., coagulase-negative staphylococci, *Propionibacterium acnes*) should not necessarily be considered evidence of definite PJI and should be evaluated in the context of other available evidence (B-III).
16. The presence of PJI is possible even if the above criteria are not met; the clinician should use his/her clinical judgment to determine if this is the case after reviewing all the available preoperative and intraoperative information (B-III).

II. <u>What Different Surgical Strategies Should Be Considered for Treatment of a Patient with PJI?</u>

17. The ultimate decision regarding surgical management should be made by the orthopedic surgeon with appropriate consultation (e.g., infectious diseases, plastic surgery) as necessary (C-III).
18. Patients diagnosed with a PJI who have a well-fixed prosthesis without a sinus tract who are within approximately 30 days of

prosthesis implantation or <3 weeks of onset of infectious symptoms should be considered for a debridement and retention of prosthesis strategy (see Figure 2 in the original guideline document; A-II). Patients who do not meet these criteria but for whom alternative surgical strategies are unacceptable or high risk may also be considered for a debridement and retention strategy, but relapse of infection is more likely (B-III).

19. A 2-stage exchange strategy is commonly used in the United States and is indicated in patients who are not candidates for a 1-stage exchange who are medically able to undergo multiple surgeries and in whom the surgeon believes reimplantation arthroplasty is possible, based on the existing soft tissue and bone defects (see Figure 3 in the original guideline document; B-III). Obtaining a prerevision sedimentation rate and CRP is recommended by the panel to assess the success of treatment prior to reimplantation (C-III). The panel believes that in selected circumstances more than one 2-stage exchange if the first attempt fails can be successful (C-III).
20. A 1-stage or direct exchange strategy for the treatment of PJI is not commonly performed in the United States but may be considered in patients with a total hip arthroplasty (THA) infection who have a good soft tissue envelope provided that the identity of the pathogens is known preoperatively and they are susceptible to oral antimicrobials with excellent oral bioavailability. There may be a greater risk of failure if bone grafting is required and effective antibiotic impregnated bone cement cannot be utilized (see Figure 3 in the original guideline document; C-III).
21. Permanent resection arthroplasty may be considered in nonambulatory patients; patients with limited bone stock, poor soft tissue coverage, or infections due to highly resistant organisms for which there is limited medical therapy; patients with a medical condition precluding multiple major surgeries; or patients who have failed a previous 2- stage exchange in which the risk of recurrent infection after another staged exchange is deemed unacceptable (see Figure 4 in the original guideline document; B-III).
22. Amputation should be the last option considered but may be appropriate in selected cases. Except in emergent cases, referral to a center with specialist experience in the management of PJI is advised before amputation is carried out (see Figure 4 in the original guideline document; B-III).

III. What Is the Medical Treatment for a Patient with PJI Following Debridement and Retention of the Prosthesis?

Staphylococcal PJI

23. Two to 6 weeks of a pathogen-specific intravenous antimicrobial therapy (see Table 2 in the original guideline document) in combination with rifampin 300–450 mg orally twice daily followed by rifampin plus a companion oral drug for a total of 3 months for a THA infection and 6 months for a total knee arthroplasty (TKA) infection (A-I). Total elbow, total shoulder, and total ankle infections may be managed with the same protocols as THA infections (C-III). Recommended oral companion drugs for rifampin include ciprofloxacin (A-I) or levofloxacin (A-II). Secondary companion drugs to be used if in vitro susceptibility, allergies, intolerances, or potential intolerances support the use of an agent other than a quinolone include but are not limited to co-trimoxazole (A-II), minocycline or doxycycline (C-III), or oral first-generation cephalosporins (e.g., cephalexin) or antistaphylococcal penicillins (e.g., dicloxacillin; C-III). If rifampin cannot be used because of allergy, toxicity, or intolerance, the panel recommends 4–6 weeks of pathogen-specific intravenous antimicrobial therapy (B-III).
24. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).
25. Indefinite chronic oral antimicrobial suppression may follow the above regimen with cephalexin, dicloxacillin, cotrimoxazole, or minocycline based on in vitro susceptibility, allergies, or intolerances (see Table 3 in the original guideline document; B-III). Rifampin alone is not recommended for chronic suppression, and rifampin combination therapy is not generally recommended. One member of the panel uses rifampin combination therapy for chronic suppression in selected situations. The recommendation regarding using suppressive therapy after rifampin treatment was not unanimous. Clinical and laboratory monitoring for efficacy and toxicity is advisable. The decision to offer chronic suppressive therapy must take into account the individual circumstances of the patient including the ability to use rifampin in the initial phase of treatment, the potential for progressive implant loosening and loss of bone stock, and the hazards of prolonged antibiotic therapy; it is therefore generally reserved for patients who are unsuitable for, or refuse, further exchange revision, excision arthroplasty, or amputation.

PJI Due to Other Organisms

26. Four to 6 weeks of pathogen-specific intravenous or highly bioavailable oral antimicrobial therapy (see Table 2 in the original guideline document; B-II).
27. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).
28. Indefinite chronic oral antimicrobial suppression may follow the above regimens (see also Table 3 in the original guideline document) based on in vitro sensitivities, allergies, and intolerances (B-III). Chronic suppression after fluoroquinolone treatment of PJI due to gram-negative bacilli was not unanimously recommended. Clinical and laboratory monitoring for efficacy and toxicity is advisable.

Similar considerations regarding hazards and effectiveness apply to those above.

IV. What Is the Medical Treatment for a Patient with PJI Following Resection Arthroplasty with or without Planned Staged Reimplantation?

29. Four to 6 weeks of pathogen-specific intravenous or highly bioavailable oral antimicrobial therapy is recommended (see Table 2 in the original guideline document; A-II).
30. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).

V. What Is the Medical Treatment for a Patient with PJI Following 1-Stage Exchange?

Staphylococcal PJI

31. Two to 6 weeks of pathogen-specific intravenous antimicrobial therapy in combination with rifampin 300–450 mg orally twice daily followed by rifampin plus a companion oral drug for a total of 3 months is recommended (see Table 2 in the original guideline document; C-III). Recommended oral companion drugs for rifampin include ciprofloxacin (A-I) or levofloxacin (A-II). Secondary companion drugs to be used if in vitro susceptibility, allergies, intolerances, or potential intolerances support the use of an agent other than a quinolone include but are not limited to co-trimoxazole (A-II), minocycline or doxycycline (B-III), or oral first-generation cephalosporins (e.g., cephalexin) or antistaphylococcal penicillins (e.g., dicloxacillin; C-III). If rifampin cannot be used because of allergy, toxicity, or intolerance, than the panel recommends 4–6 weeks of pathogen-specific intravenous antimicrobial therapy.
32. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).
33. Indefinite chronic oral antimicrobial suppression may follow the above regimen with either cephalexin, dicloxacillin, co-trimoxazole, or minocycline or doxycycline based on in vitro susceptibility, allergies, or intolerances (see Table 3 in the original guideline document; B-III). Rifampin alone is not recommended for chronic suppression, and rifampin combination therapy is also not generally recommended. One member of the panel uses rifampin combination therapy for chronic suppression in selected situations. The recommendation regarding using suppressive therapy after rifampin treatment was not unanimous. Clinical and laboratory monitoring for efficacy and toxicity is advisable. The decision to offer chronic suppressive therapy must take into account the individual circumstances of the patient including the ability to use rifampin in the initial phase of treatment, the potential for progressive implant loosening and loss of bone stock, and the hazards of prolonged antibiotic therapy; it is therefore generally reserved for patients who are unsuitable for, or refuse, further exchange revision, excision arthroplasty, or amputation.

PJI Due to Other Organisms

34. Four to 6 weeks of pathogen-specific intravenous or highly bioavailable oral antimicrobial therapy is recommended (see Table 2 in the original guideline document; A-II).
35. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).
36. Indefinite chronic oral antimicrobial suppression should follow regimens in Table 3 of the original guideline and be based on in vitro sensitivities, allergies, and intolerances (B-III). Chronic suppression after fluoroquinolone treatment of gram-negative bacilli was not unanimously recommended. Clinical and laboratory monitoring for efficacy and toxicity is advisable. Similar considerations regarding hazards and effectiveness apply to those above.

VI. What Is the Medical Treatment for a Patient with PJI Following Amputation?

37. Pathogen-specific antimicrobial therapy should be given until 24–48 hours after amputation assuming all infected bone and soft tissue has been surgically removed and there is no concomitant sepsis syndrome or bacteremia. If sepsis syndrome or bacteremia are present, treatment duration is to be according to recommendations for these syndromes (C-III).
38. Four to 6 weeks of pathogen-specific intravenous or highly bioavailable oral antimicrobial therapy is recommended if, despite surgery, there is residual infected bone and soft tissue (i.e., hip disarticulation for THA infection, long-stem TKA prosthesis where the prosthesis extended above the level of amputation; see Table 2 in the original guideline document; C-III).
39. Monitoring of outpatient intravenous antimicrobial therapy should follow published guidelines (see Tice AD, Rehm SJ, Dalovisio JR, et al. Practice guidelines for outpatient parenteral antimicrobial therapy. IDSA guidelines. Clin Infect Dis 2004; 38:1651–72) (A-II).

Definitions:

Quality of Evidence*

I. Evidence from ≥1 properly randomized, controlled trial.
II. Evidence from ≥1 well-designed clinical trial, without randomization; from cohort or case-controlled analytic studies (preferably from >1 center); from multiple time-series; or from dramatic results from uncontrolled experiments.

III. Evidence from opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

Strength of Recommendations*

A. Good evidence to support a recommendation for or against use.
B. Moderate evidence to support a recommendation for or against use.
C. Poor evidence to support a recommendation.

*Adapted from Canadian Task Force on the Periodic Health Examination, 1979. Reproduced with the permission of the Minister of Public Works and Government Services Canada.

Clinical Algorithm(s)

The original guideline document contains the following clinical algorithms:

- Preoperative and intraoperative diagnosis of prosthetic joint infection
- Management of prosthetic joint infection
- Management of prosthetic joint infection—removal of prosthesis
- Management of prosthetic joint infection when patients are not a candidate for new prosthesis

Scope

Disease/Condition(s)

Prosthetic joint infection (PJI)

Guideline Category

Diagnosis

Evaluation

Management

Treatment

Clinical Specialty

Infectious Diseases

Internal Medicine

Orthopedic Surgery

Pathology

Plastic Surgery

Intended Users

Advanced Practice Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To provide a consensus statement that addresses the diagnosis and the medical and surgical treatment of infections involving a prosthetic joint

Target Population

Patients with suspected or confirmed prosthetic joint infections

Interventions and Practices Considered

Diagnosis/Evaluation

Preoperative Evaluation

1. Thorough history and physical examination
2. Test for sedimentation rate or C-reactive protein (CRP)
3. Plain radiograph
4. Arthrocentesis with synovial fluid analysis
5. Withholding antimicrobial therapy for at least 2 weeks prior to collection of synovial fluid
6. Blood cultures for aerobic and anaerobic organism
7. Imaging studies such as bone scans, leukocyte scans, magnetic resonance imaging, computed tomography, and positron emission tomography (not recommended routinely)

Intraoperative Diagnosis

1. Intraoperative histopathological examination of periprosthetic tissue samples
2. Aerobic and anaerobic culture at the time of surgical debridement or prosthesis removal
3. Withholding antimicrobial therapy for at least 2 weeks before collecting intraoperative culture specimens

Management/Treatment

1. Debridement and retention of prosthesis strategy
2. Two-stage exchange strategy
3. One-stage or direct exchange strategy
4. Permanent resection arthroplasty
5. Amputation
6. Pathogen-specific antimicrobial therapy (intravenous or oral)
7. Indefinite chronic oral antimicrobial suppression
8. Monitoring of outpatient antimicrobial therapy according to published guidelines

Major Outcomes Considered

- Sensitivity and specificity of diagnostic tests
- Success rate and treatment failure rate of surgical and antimicrobial management
- Functional outcome
- Adverse effects and toxicity of antimicrobial treatment

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Two members of the guideline panel initially reviewed the existing literature. The literature search, which included the MEDLINE database between 1966 and 2011, Cochrane library database, MD Consult, Up to Date, and the National Guideline Clearinghouse, was performed on multiple occasions, the last being in April 2011, using multiple search terms such as "joint prosthesis" and "PJI". Hand-searching of bibliographies of identified articles was also undertaken.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence*

I. Evidence from ≥1 properly randomized, controlled trial.
II. Evidence from ≥1 well-designed clinical trial, without randomization; from cohort or case-controlled analytic studies (preferably from >1 center); from multiple time-series; or from dramatic results from uncontrolled experiments.
III. Evidence from opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.

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Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

In evaluating the evidence regarding the management of prosthetic joint infection (PJI), the panel followed a process used in the development of other Infectious Diseases Society of America (IDSA) guidelines. The process included a systematic weighting of the quality of the evidence.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Panel Composition

A panel of infectious disease specialists and an orthopedist, drawn from North America and Europe, who are experts in prosthetic joint infection (PJI) was convened. The panelists had both clinical and laboratory experience with PJI.

Process Overview

Recommendations for the medical management of PJI were derived primarily from case reports, nonrandomized retrospective case series, and 1 single-center randomized clinical trial.

Consensus Development Based on Evidence

Two members of the panel initially reviewed existing literature and formulated a first draft of the guidelines. This first draft was circulated electronically to all members of the panel for comments and review. The two panel members then incorporated these comments into a second and third draft that was reviewed electronically. Topics on which consensus could not be reached were discussed by the panel members electronically, by teleconferences, and in person.

Rating Scheme for the Strength of the Recommendations

Strength of Recommendations*

A. Good evidence to support a recommendation for or against use.
B. Moderate evidence to support a recommendation for or against use.
C. Poor evidence to support a recommendation.

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Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

All members of the panel approved the final draft. Feedback from external peer reviews was obtained and changes made after review with the entire panel. The guideline was reviewed and approved by the Infectious Diseases Society of America (IDSA) Standards and Practice Guidelines Committee (SPGC) and the Board of Directors prior to dissemination.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Consideration of these guidelines may help reduce morbidity, mortality, and the costs associated with prosthetic joint infections.

Potential Harms

Allergy, toxicity, drug interactions, intolerance, and development of resistance to antimicrobial therapy:

- The possibility of prolonged QTc interval and tendinopathy should be discussed and monitored when using fluoroquinolones.
- The possibility of *Clostridium difficile* colitis should be discussed when using any antimicrobial.
- Although vancomycin has well-known potential toxicities including leukopenia, ototoxicity, and, rarely, nephrotoxicity, it must be remembered that linezolid has been associated with cytopenias, peripheral neuropathy, and optic neuritis and serotonin syndrome in patients treated concurrently with monoamine oxidase inhibitors or serotonin reuptake inhibitors and lactic acidosis.
- Severe anemia may also be more common in patients with preexisting anemia prior to the use of linezolid. In addition, one article has suggested that the concomitant use of rifampin may decrease levels of linezolid. However, other authors have suggested that this combination is efficacious in humans and experimental models.
- Monitoring for daptomycin toxicity including rhabdomyolysis, neuropathy, and eosinophilic pneumonia is important. It is recommended that statins be stopped, if possible, while administering daptomycin.
- The decision to offer chronic suppressive therapy must take into account the individual circumstances of the patient including the ability to use rifampin in the initial phase of treatment, the potential for progressive implant loosening and loss of bone stock, and the hazards of prolonged antibiotic therapy; it is therefore generally reserved for patients who are unsuitable for, or refuse, further exchange revision, excision arthroplasty, or amputation.
- The clinician should be aware of the potential for systemic toxicity of local antimicrobial delivery devices, although this rarely occurs.

Qualifying Statements

Qualifying Statements

- It is important to realize that guidelines cannot always account for individual variation among patients. They are not intended to supplant physician judgment with respect to particular patients or special clinical situations. The Infectious Diseases Society of America (IDSA) considers adherence to these guidelines to be voluntary, with the ultimate determination regarding their application to be made by the physician in light of each patient's individual circumstances.
- The panel realizes that not all medical institutions will have the necessary resources to implement all the recommendations in these guidelines. Proper referral to specialty centers may need to occur.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

Pocket Guide/Reference Cards

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

Osmon DR, Berbari EF, Berendt AR, Lew D, Zimmerli W, Steckelberg JM, Rao N, Hanssen A, Wilson WR. Diagnosis and management of prosthetic joint infection: clinical practice guidelines by the Infectious Diseases Society of America. Clin Infect Dis. 2013 Jan;56(1):e1-e25. [175 references] PubMed

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2013 Jan

Guideline Developer(s)

Infectious Diseases Society of America - Medical Specialty Society

Source(s) of Funding

Infectious Diseases Society of America (IDSA)

Guideline Committee

Infectious Diseases Society of America (IDSA) Standards and Practice Guidelines Committee

Composition of Group That Authored the Guideline

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Financial Disclosures/Conflicts of Interest

Guidelines and Conflicts of Interest

All members of the expert panel complied with the Infectious Diseases Society of America (IDSA) policy on conflicts of interest, which requires disclosure of any financial or other interest that might be construed as constituting an actual, potential, or apparent conflict. Members of the expert panel were provided IDSA's conflicts of interest disclosure statement and were asked to identify ties to companies developing products that might be affected by promulgation of the guideline. Information was requested regarding employment, consultancies, stock ownership, honoraria, research funding, expert testimony, and membership on company advisory committees. The panel made decisions on a case-by-case basis as to whether an individual's role should be limited as a result of a conflict. Potential conflicts are listed below.

Potential Conflicts of Interest

The following list is a reflection of what has been reported to IDSA. In order to provide thorough transparency, IDSA requires full disclosure of all relationships, regardless of relevancy to the guideline topic. The reader of these guidelines should be mindful of this when the list of disclosures is reviewed.

D. O. has received research grants from Cubist Pharmaceuticals and Ortho-McNeil.

E. B. has received funding from Cubist Pharmaceuticals, Ortho-McNeil, Orthopaedic Research and Education Foundation, and Mayo.

A. H. has received royalties from Stryker Corp for hip/knee design.

W. Z. has served as a board member of Pfizer and on the speakers' bureaus of Pfizer and Synthes, Inc.

D. L. is a board member of Basilea.

A. B. was awarded a Pfizer Visiting Professorship to the Department of Allergy and Infectious Diseases at the University of Washington, Seattle.

All other authors report no potential conflicts.

All authors have submitted the International Committee of Medical Journal Editors (ICMJE) Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the Infectious Disease Society of America (IDSA) Web site .

Availability of Companion Documents

The following is available:

- Prosthetic Joint Infection. Pocket guide. Infectious Diseases Society of America (IDSA); 2013. Electronic copies: Available from the Infectious Diseases Society of America (IDSA) Web site .

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on February 13, 2013. The information was verified by the guideline developer on February 28, 2013. This summary was updated by ECRI Institute on October 25, 2013 following the U.S. Food and Drug Administration advisory on

Fluoroquinolone Antibacterial Drugs. This summary was updated by ECRI Institute on May 18, 2016 following the U.S. Food and Drug Administration advisory on Fluoroquinolone Antibacterial Drugs.

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